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## CRITIQUE OF MANPOWER DEVELOPMENT IN OIL AND GAS SECTOR OF NIGERIA

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### ***Abstract***

*Since the finding of commercial oil in Nigeria, the State has been grappling with the problem of the human resources development. The nation is battling with it to show for the enormous mineral resources that are available to it and which it continues to squander. Even with the presence of the multi-national oil companies in Nigeria not much has been achieved in technology transfer in the past fifty years. The level of unemployment has risen to 33 percent and only about one percent of the population is employed in the oil sector. This paper which adopts the doctrinal method examines the various perspectives that manpower development in the oil and gas sector can be viewed. It finds that the State is tenacious in seeing that humans resource is developed to critical levels but the multi-national oil companies have no clear-cut commitment to same except as is necessary for profit maximization. It therefore calls for more public-private initiatives and fuller implementation of the local content doctrines and involvement of local content vehicles.*

***Key Words:*** *Personnel management, Industrial Relations, Human Resource Development, PTDF, Local Content, Oil and Gas*

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### **Introduction**

Clearly, a nation which is incapable of developing the skills and knowledge of its people and utilize them effectively in the national economy will be

unable to develop anything else (Anyanwu *et al.*, 1997).<sup>1</sup> The problem of most developing nations is not poverty of natural resources but the underdevelopment of their human resources. The first step in development becomes the development of the human capital.<sup>2</sup> Human capital or human resources is the totality of the energies, skills, knowledge and experience available in a country. It is the managerial, scientific, engineering, technical, craftsmen and other skills which are employed in creating, designing, developing organisations, managing and operating productive and service enterprises and economic institutions (Anyanwu *et al.*, 1997)<sup>3</sup>. It requires planning, development and management.

### **Theoretical Framework**

Human resource planning is thus the process of determining the policies and programmes that will develop, distribute and utilize human resources with a view to attaining a nation's broader goals of socio-economic and political development. Manpower planning is an important factor in the development of a nation's human resources. It aims at projecting the manpower requirements of a nation for a given period and the composition, therefore, developing suitable educational programmes to develop the needed labour skills, and efficient a-locative labour resources so as to eliminate labour shortage or surpluses (Anyanwu, *et al.*, 1997)<sup>4</sup> The principal aim of planning is to ensure that the right people are available for the right jobs at the right time. In this way, manpower shortages or surpluses are eliminated while labour resources are efficiently allocated beside the development of suitable educational programmes.

Human resources development involves the improvement and or the transformation of a nation's human resources by better Medicare, nutrition, accommodation, environment, education and training. Emphasis

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<sup>1</sup> See J. C Anyanwu, et al, *The Structure of the Nigerian Economy (1996-1997)*, (Onitsha: Joanee Educational Publishers Ltd., 1997) at 288

<sup>2</sup> *Id.*, at 296

<sup>3</sup> *Id.*, at 288.

<sup>4</sup> *Id.*, at 296.

is placed on education and training.<sup>5</sup>

Manpower development relates to the training and development of a nation's human resources to achieve the highest productivity and most efficient interaction with the other factors of production. It has to do with channeling a nation's human resources towards the growth and development needs of the nation.

Employment is a particularly touchy subject both for the oil companies and communities. The companies justifiably complain about lack of suitably qualified manpower from the communities while the communities berate the employment practices of the industry. The fact is that both arguments have merit. Competition for jobs in the industry is quite fierce and unfortunately, there is a comparative paucity of the kind of talent that the industry needs in the Niger Delta compared to that available elsewhere. The result is that most of the available spaces go to people outside the zone leading to the domination of the industry by non-indigenes of the Delta. Not unexpectedly, this has given rise to crises of marginalization because eventually it is mainly the non-indigenes that conduct interview for entrants (Kunaiyi-Akpanah, 2005).<sup>6</sup>

According to Storey (1995)<sup>7</sup> Human Resource Management is a distinctive approach to employment management which seeks to achieve competitive advantage through the strategic deployment of a highly committed and capable workforce, using an integrated array of cultural, structural and personnel techniques. The most fundamental idea of human resource management is that amongst all the factors of production, the human resource really makes the difference.

In other words, it is the human capability and commitment which in the final analysis distinguishes successful organizations from the rest. That therefore, the human resource ought to be treated with great care, requires and deserves managerial time and attention and ought to be nurtured as a valued asset and not to be regarded as an incidental cost or matter. The

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<sup>5</sup> Id., at 289.

<sup>6</sup> See Daemi Kunaiyi-Akpanah, *Community Relations in the Oil Industry – Perspective of a Stakeholder*, the Guardian, Thursday December 8, 2005 at 78 – 79.

<sup>7</sup> John Storey, *Human Resource Management: A Critical Text*, ed, (London: International Business Press, 1995) at 5-7.

second idea about human resource management is that it is aimed not merely to seek compliance with rules and regulations from employees but to strive for the much more ambitious objective and programme of commitment. The third idea is that it is a matter of strategic importance requiring the full attention of the management executive and informed by the competitive and business environment. Fourthly, human resource management should not be left to personnel specialists but all line managers must be involved in conducting team briefings, holding performance appraisal interviews, target setting and managing performance related pay. The fifth distinguishing feature is that it shifts emphasis away from personnel procedures and rules as a basis of good practice in favour of a new accent on the management of culture.

For Mckenna and Beech (1998)<sup>8</sup> the factors that have led to the creation and popularity of human resource management are the forces in the environment. These include increased competition, quality of staff and products, flexible modes of operation and a willingness to adapt to changes. Therefore, the major themes running through human resource management are the acknowledgment that employees are valued assets of the company; that there should be a strategy for human resource and a strategy for business; that the corporate culture should be managed so as to make it compatible with the requirements of corporate strategy; that the seeking of the commitment of employees to the organisation is of far greater value than forcing compliance to the demands of the organisation; that the value of commitment is that it binds employees to the organisation. But commitment to an organisation is not something that springs out without prodding. Individuals have attributes and attachments to their own values as well as values connected with membership of the family, the trade union or professional body and these could clash with commitment to the organizational values; that to elicit commitment, reference is often had to mutuality in terms of mutual goals, influence, respect, rewards, and responsibility for the worker and the organisation; that emphasis should be placed on common interest of management and employees in the

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<sup>8</sup> Eugene Mckenna and Nic Beech, *The Essence of Human Resource Management*, (London: Prentice Hall, 1988) at 9-11.

profitability of the enterprise which can lead to the tapping of a substantial reservoir of initiative and commitment within the workforce.

For Storey (1995)<sup>9</sup> therefore, human resource management can be viewed as a comparatively new approach to personnel management which considers people as the key resource. It subscribes to the notion that it is important to communicate well with employees, to involve them in what is going on and to foster their commitment and identification with the organisation. Thus, a strategic approach to the acquisition, management and motivation of people at work is heavily emphasized. The objectives of human resource management are therefore as follows: company objectives are to be achieved through its most valued resource, its workforce: in order to enhance both individual and organizational performance people are expected to commit themselves to the success of the organisation: a coherent set of personnel policies and practices geared towards effective organisational performance is a necessary condition for the company to make the optimum use of resources when striving to meet business objectives: an integration of human resource management policies and business objectives should be sought: human resource management policies should support the corporate culture where appropriate or change the culture for the better where it is deemed inappropriate: an organisational climate supportive of individual creativity and in which energetic endeavours can be sustained should be nurtured.

It would provide a fertile terrain for the promotion of teamwork, innovation and total quality management: the creation of a flexible organisational system that is responsive and adaptive and helps the company to meet exacting objectives in a competitive environment: a determination to increase individual's flexibility in terms of the hours that they work and the functions that they carry out: the provision of task and organisational conditions which are supportive of people trying to realise their potentials at work: the maintenance and enhancement of both the workforce and the product service.

Personnel management assists with the management of people in an organization. It is concerned with establishing, maintaining and developing

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<sup>9</sup> John Storey, Op. Cit., at 1-4.

systems which provide the framework of employment starting from entry (selection and recruitment) through the management of the employment relationship (reward, appraisal, development, industrial relations, grievance and discipline) and finishing with the termination of the relationship (retirement, resignation, redundancy and dismissal) It is a management process driven by efficiency and equality of opportunity.

Personnel management functions include the following: human resource planning, which is concerned with matching the organisational demand for quantity and quality of employees with the available supply and resources to pay the cost implications: recruitment, which involves job analysis whereby the job to be undertaken by an employee is closely examined and the attributes of a suitable employee needed for the job is spelt out: selection, which involves a variation of techniques including advertisement, application, interviews and appointment: performance, appraisal which is used to assess the performance of employees against agreed targets with procedures designed and administered by line managers: training, which ranges from simple job instruction to educational training courses offered by providers external to the organisation: reward, which involves the determination of the rate of pay, study leave with or without pay, fringe benefits etc: industrial relations, which involves entering into collective bargaining with the trade union, extent of involvement in trade unionism, administration of grievance procedure and settlement of disputes etc: employee communications and participation which involves communication of decisions of the board to the employees: and personnel records, which involves record keeping in a central place of records ranging from letters of application, queries, promotion, leave forms, loan scheme form, salary advances etc.<sup>10</sup>

For Mckenna and Beech (1988)<sup>11</sup> Human Resource Management originated from the traditional personnel management school and has replaced it to some extent. It was felt that the old system was no longer functional and there was the need for a change to emphasize both

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<sup>10</sup> Id at 8 – 9.

<sup>11</sup> Eugene Mckenna and Nic Beech, Op. Cit., at 19.

production or organisation and labour or employment. In human resource management therefore, there is greater emphasis on strategic issues and the way in which human resources contributes to the achievement of corporate objectives. It ensures that people's energies are sufficiently focused in order to add value to organizational inputs. It underlies the need and importance of flexibility and ability to react and adapt quickly to changes in the organization's environment. It is concerned with quality management. Although human resource management embraces cost effective business approach, it values employees for perfectly understandable reasons being concerned with the wellbeing of people is seen as a way of motivating and inspiring the workforce.

Human resource management takes a systems approach to the analysis and management of organisations. It sees the different parts of the organisation functioning effectively towards the overall goals of the enterprise. This it does through planning, appraisal, training and reward. These systems must be integrated and pulled in the same direction.

In the oil and gas industry as elsewhere, personnel management and human resource management and development share some common platforms. They have a concern for people and their needs together with finding effective means of selecting, training, appraising, developing and rewarding them. Personnel management tends to be parochial, striving to influence line managers whereas human resource management is integrated into the role of line managers with bias towards business. Personnel management places emphasis on bureaucratic control in a reactive sense over manpower and personnel systems. It responds to employment legislations whereas human resource management is a more integrative mechanism in bringing people issues into line with business issues with a pronounced problem seeking and problem solving orientation and a determination to build collaborative organisational system where employee development features prominently. Personnel management is a series of activities related to various aspects of an employee's relationship with the organisation. Human resource management is also concerned with these issues but in addition, it stresses the primacy of business needs. Human resource management unlike

personnel management embraces individual flexibility and congruency between individual and organizational goals whereas personnel management is conceived with systems applied to individuals and collectivism.

### **The PTDF and Human Resource Development**

Prior to the establishment of the PTDF, there existed the Gulf Oil Company Training Fund, which Act was repealed by the promulgation of Act No 25 of 1973 establishing the PTDF as a Fund for the purposes of training and educating Nigerians in the petroleum industry (Mohammed, 2007).<sup>12</sup> According to President Obasanjo (2007)<sup>13</sup> technology capacity building and the PTDF Act arose in the wake of the Arab Oil Embargo and the subsequent quadrupling of oil prices by OPEC. The Act was promulgated by the Yakubu Gowon Administration in 1973 with the purpose of building the capacity of Nigerians to be active participants in the then emerging petroleum industry.

Section 1 of the Act provides that the following moneys shall be paid into the Fund: the balance of monetary assets outstanding in the accounts of the Gulf Oil Company Training Fund at the commencement of the Act; all further sum payable to or received by the Minister of Mines, Power and Steel (Minister of Energy) in terms of any agreement made by the Government and any company in relation to petroleum oil prospecting or mining concessions; and any other sum from time to time freely donated or accruing to the Government or the Fund for the training and education of Nigerians in the petroleum industry as the Minister may direct. Under Section 2 of the Act, the Fund is available for the purposes of training Nigerians to qualify as graduates, professionals, technicians and craftsmen in the fields of engineering, geology, science and management in the petroleum industry in Nigeria or broad. In other words, the objects of the Act were clearly to take whatever actions necessary to ensure that Nigerians were educated, trained, and developed to be experts and key

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<sup>12</sup> Kabir Mohammed, PTDF: The Journey So Far – Successes and Achievements, Vanguard, Sunday April 15, 2007 at 8.

<sup>13</sup> Olusegun Obasanjo, My Stand on the PTDF, The Guardian, Sunday March 18, 2007 at 3.



players in petroleum technology. The mischief that the act sought to cure was the very low level of participation of Nigerians in the petroleum industry.

Specifically, Section 2 provides that the Fund shall be utilized for the following purposes: to provide scholarship and bursaries in Universities, colleges, Institutions and in petroleum undertakings in Nigeria or broad; to maintain, supplement or subsidize such training or education; to make suitable endowments to faculties in Nigerian Universities, Colleges of Institutions approved by the Minister; to make available suitable books and training equipment in the Institutions aforesaid; to sponsor regular visits to oil fields, refineries, petro-chemical plants, and arrange any necessary attachments of personnel to establishments connected with the development of the petroleum industry; and to finance and participate in seminars and conferences which are connected with the petroleum industry in Nigeria or abroad.

Since the establishment of the Fund in 1973, it remained as a desk in the Department of Petroleum Resources from where it was administered until 2000 when it was made an independent parastatal (Mohammed, 2007).<sup>14</sup> The Fund has embarked on overseas scholarship schemes; projection execution; petroleum training institute upgrade; universities upgrade projects; information and communication technology centre; Niger Delta projects; universities endowment programme, Nigerian content development; and strategic support and collaboration with stakeholders. The Overseas Scholarship Scheme which is the Fund's flagship programme, is designed to meet the long-term capacity requirements of the oil and gas industry through training of young Nigerians in related fields of engineering, geological sciences, environmental and energy studies both at master's and doctoral levels. The expectation is that beneficiaries shall fit in directly to the oil and gas industry and or the academia and contribute positively to nation building. In the long term, this shall help to meet the set targets in attainment of the Nigerian content and also make Nigeria the hub of oil and gas personnel development for the West African sub region and the Gulf of Guinea. The scheme covers payments for tuition fees,

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<sup>14</sup> Kabir Mohammed, Loc. Cit.

accommodation and living expense to successful scholars who are trained at both the masters and Doctorate levels mainly in the best ten acclaimed Universities in United Kingdom and a few Universities in North America and some other parts of Europe. Between 2002 and 2006, the sum of 13,159,724.38 pounds was spent and additional sum of 134,232.71 dollars has so far been expended by the Fund in the training of 596 MSc and 86 PhD scholars.<sup>15</sup>

The Local Scholarship Scheme which is expected to commence as from the 2007/2008 academic year was conceived to derive direct and maximum benefit from the Universities Upgrade and Endowment Programmes of the Fund. The scheme is designed to encourage outstanding students in Nigeria to pursue programmes relevant to the development of the oil and gas industry.

There are two components of the scheme: the undergraduate component and the postgraduate component. As a pilot scheme, it will commence in the six Universities in which the Fund has already instituted endowment programmes, but will in due course be expanded to cover other Universities nationwide. For the undergraduate component, the target beneficiaries are students at the 200 level with strong academic background in environmental, civil, chemical, electrical electronics, mechanical, industrial, petroleum and gas engineering as well as chemistry, geology, computer science, mathematics and physics. The value of the scholarship for the undergraduate students include tuition fees as may be charged by the University, the sum of N150,000.00 for accommodation and living expenses per scholar each year in addition to the sum of N50,000.00 allowance for final year project.<sup>16</sup>

Similarly, for the MSc students, the value of the scholarship include: tuition fees as may be charged by the University, N200,000.00 for accommodation and living expenses per scholar per year and N100,000.00 for final year research project allowance per scholar. It is expected that the scholar will be sent overseas for six months to enable him bench work with new technologies as may be relevant to the field. The conditions of the MSc

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<sup>15</sup> Id., at 9.

<sup>16</sup> Id.

programmes also applies to the PhD, except that the N100,000.00 for the research project is granted yearly for three years.<sup>17</sup>

### **The PTDF and Institutional Upgrade**

The Petroleum Training Institute, Effurun, Delta State was established in 1973 by the Federal Government as a prerequisite for the membership of the Organization of Petroleum Exporting Countries (OPEC) to train indigenous middle level manpower to meet the labour force demand of the oil and gas industry in Nigeria and the West African sub-region. A total of N9.3 billion had been involved in the Institution's upgrade as at 2007 in the critical areas of education, organization and infrastructure (Mohammed, 2007).<sup>18</sup> Furthermore, in the Fund's effort to develop the local capacities of the Nigerian oil and gas related University programmes, it has embarked on upgrades in selected departments in Universities in Port Harcourt (Gas Engineering), Maiduguri (Geology), Ibadan (Petroleum Engineering), Nsukka (Geology), Benin (Chemical Engineering), Zaria (Chemical engineering), Sokoto (Petroleum Chemistry) and Jos (Geology and Mining) in terms of infrastructure, laboratory equipment, books, IT facilities, power generating sets, water facilities etc. About N2.8 billion had been involved as at 2007. The upgrades are continuing in many other Universities. In a bid to execute one of the mandates for which the Fund was established, the PTDF had endowed Professorial Chairs in six Federal Universities (at Ibadan, Port Harcourt, Maiduguri, Zaria, Nsukka and Sokoto, in the sum of N60 million 'seed money' each) for the purposes of advancing indigenous research in petroleum studies and related disciplines for the nation's oil and gas industry. The endowment sum has been increased to one billion naira as at 2007.

Canvassing the case for PTDF ICT centres, Mohammed (2007)<sup>19</sup> had submitted that information communication technology is central to all field of specialization in the oil and gas industry from geosciences to drilling engineering and petroleum economics. Information communication

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<sup>17</sup> Id.

<sup>18</sup> Id.

<sup>19</sup> Id.

technology is presently used from the upstream exploration and appraisal of oil locations to the downstream marketing, retailing and in the automation of various aspects of the oil and gas industry. In *'My Stand On The PTDF'*, President Obasanjo (2007)<sup>20</sup> equally opined that ICT has become so pervasive in every sector, every industry and economy that to imagine that it is possible to educate, train and build capacity in petroleum technology or indeed any other field of the sciences and the humanities without investing in its infrastructure and tools would be 'foolhardy, even absurd'. It is the 'pencil, pen and paper around which the analogue workplace was built upon. It is impossible in the world of today to realize the objects of the PTDF Act without substantial investment in information and communications technologies, infrastructure and tools'.

Given the poor background of most students in ICT which affected their performance and interest in science and technology related courses, PTDF considered it necessary to strengthen the foundation of ICT for students at the intermediate and secondary levels as a basis for training of manpower for oil and gas industry as obtaining in India, China, and other emerging ICT countries in the third world. Accordingly, the PTDF established ICT centers in 24 Universities, 20 Federal Colleges of Education and 102 Unity Schools across the country.<sup>21</sup>

### **Niger Delta Projects and the PTDF**

In the Niger Delta, the Fund had been involved in the process of infrastructural development to fast-track the socio-economic development of the zone. Three institutional intervention projects have been identified: the construction of National Technical Institute (NIT) for Gas and Petroleum Studies, Bonny Island, Rivers State (N4.2 billion); the establishment of a Federal Polytechnic of Oil and Gas at Ekowe, Bayelsa State (3.2 billion); and the development of infrastructure for a Secondary School and a Primary School at Okerenkoko and Oporoza, Warri South, Delta State (N247 million).<sup>22</sup>

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<sup>20</sup> Olusegun Obasanjo, Loc. Cit.

<sup>21</sup> Kabir Mohammed, Op. Cit., at 10.

<sup>22</sup> Id., at 11

### **Petroleum Pricing Policy and Industrial Relations**

Labour, government and the judiciary have not had the best of relationships with issues bordering on the pricing of petroleum products in Nigeria. Throughout the world, Nigeria tops the list in the rapidity of its pricing mechanism. Government rationalizes its pen chance for hiking the prices of products with a worn out excuse that the hike is the only way to ensure regular supply of petroleum products and provision of infrastructure. Since 1973, the pump price of petroleum products has been increased at various times. In January 2004, petrol sold for between N38 and N40.50k per liter. The prices were raised to N41.70k and N42.70 in March, 2004. The marketers increased the price on 29<sup>th</sup> May 2004 to N50 following a 15% increase effected by the NNPC in the ex-depot price of petrol from N33.50k to N38.50k per liter.

The history of hiking prices dates back to 1973 when petrol sold for 9k per liter. In 1979, it was increased to 15k. In 1986, it was hiked to 39k per liter. It was hiked again to 51k in 1990; 70k in 1991, and N3.35k in 1993. In 1994, it was increased to N11 and in 1997, it got to N20. In 2000, it was increased to N22 per liter; in 2003, it was increased again to N34. In 2003 and for the first time in the history of increment, the government introduced Petroleum Tax of N1.50k. By 2007, it came up to N100 or more before it was reduced to N70 by the Yar'Adua administration. The worst came up in the administration of Goodluck Jonathan when in 2012, the pump price jump to N140 resulting in complete withdrawal of subsidy and scale industrial action and strike by labour forcing government to back pedal to pump price of N95. The explanation of Government that it would save 8 billion dollars for provision of infrastructure does not sell to the people.

The incessant increment exacerbated the already frosty relationship between the government and labour and became an issue of litigation thereby drawing on the opinion of the public against the judiciary.<sup>23</sup> For instance, government's incessant increment has incensed many people

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<sup>23</sup> Kodilinye Obiawu and Clifford Ndujihe, Labour Walks the Tightrope as the Nation Faces High Fuel Prices, the Guardian, Monday, September 27, 2004 at 9.

who reason that the inordinate hurry to bury the Nigerian Labour Congress and its leadership, which has been the only opposition to such increases in the past, was to pave way for such increases. Government had always demonstrated zero tolerance to labour's stringent opposition, labeling its leaders as subversive elements.

In fact, government packaged an executive bill on labour reform, and with the Senate, rail-loaded same into law. For Chima Ubani (Aderibigbe, 2004)<sup>24</sup>, the calculated attack on the NLC would not stop the struggle of the Nigerian people against unpopular policies. It had been on since the military and reached its highest water mark at a time, with the appointment of a Sole Administrator for labour.

Yet, the role of the judiciary had not been neat. The general thesis is that the right of citizens as conferred by the Constitution is conferred generically on workers to protest and protect their interests irrespective of the nature of the issues involved. It was within the mainstream of this thesis that Justice Lawal Gumi, Chief Judge of the High Court, Abuja, opined that the Nigerian Labour Congress had an inalienable right to protest any unpopular policy of government considered detrimental to the fundamental rights of the Nigerian workers and peoples. But Justice Roseline Ukeje of the Federal High Court, Abuja held a contrary view to the effect that the issue of fuel tax was not contemplated among the issues that qualified the workers to go on strike; that Section 47 of the *Trade Union Act* did not empower the NLC to call out workers of the affiliate unions on strike; and that the labour union would be in breach of Section 40 of the 1999 Constitution if it compelled market women and even hooligans to join them in their strike.

In other words, the pricing policy in respect of petroleum and the introduction of N1.50k fuel tax do not qualify as trade disputes for which the NLC, as a trade union can embark on a strike. The policy of hiking petrol prices does not qualify as a matter of employer-employee industrial relations. Yet, strike has remained labour's only weapon in the battle to halt

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<sup>24</sup> Yinka Aderibigbe, Muzzled Opposition and Increase in Fuel Price, the Guardian, Monday, September 27, 2004 at 15.

upward review of prices of petroleum products. The option of strike is thus not in furtherance of trade union matters or economic strike, but a political strike against unjust policies of government' a tool to protest dictatorship. The question therefore is whether it is more democratic to stop labour from protesting government's attitude to the hiking of the prices of petroleum products than for labour to protest government anti-people policies. In other words, the issue was not whether government was right in imposing the tax, but that labour had the right to protest the imposition. Furthermore, it was feared that government's readiness to run to the courts and the readiness of the courts to hanker to the tunes and dictates of government was turning the judiciary into political instruments of the government. To labour, other political groups and civil societies, the courts are serving political ends acting as arbiters in the interest of peace rather than justice.<sup>25</sup> As canvassed by Peter Akpatason (2007)<sup>26</sup> of NUPENG, the problem of youth restiveness and increasing militancy was not an oil industrial relations issue but a failure of government to positively address a political problem. The oil industry only became the playing field, a scapegoat, for the actors such as the hostage takers, politicians, the Federal, States and Local Government leaders who were busy appropriating the proceeds of the oil industry in a manner that suits their own personal interests without regards to the people; taking advantage of the cloudy political environment to unleash mayhem and terror to make money for themselves. Thus, according to David Dungs (Adulsalam, 2007)<sup>27</sup> a former Military Governor of Delta State, rather than the destructive trend of blowing up oil pipelines, militant youths in the Delta should turn their anger on their leaders who collect money from the Federal Government and oil companies without utilizing them for the development of the area. Dungs stated, 'the youths know their traditional leaders, Local Government Chairmen and Governors, etc. A lot of money was paid to the elders who were initially negotiating on behalf of the communities but very little of that money was going actually into the communities. Most ended up in the

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<sup>25</sup> Kodilinye Obiawu and Clifford Ndujihe, Loc. Cit.

<sup>26</sup> Comrade Peter Akpatason, Energy Briefs, Vanguard, Tuesday January 9, 2007 at 23.

<sup>27</sup> Isa Adulsalam, Way out of Niger Delta Crisis-Dungs, The Guardian, Friday July 27, 2007 at 4.

banks abroad and in the development of places and areas other than the Niger Delta’.

### **Niger Delta and Human Capacity Building**

The worsening state of the nation’s economy, continuous slide in the quality of the lives of its citizens and the rising rate of crime in a country endowed with huge human and natural resources have not ceased to bother many people within and outside Nigeria.<sup>28</sup> The nation’s economy would have been positively transformed with over 280 billion dollars oil proceeds generated in Nigeria in the past 30 years if the political and technocratic elite under successive administrations had not colluded with local contractors to misuse the funds. The very obvious failure to effectively, efficiently and economically manage the huge oil resources earned by the nation over the past 30 years is painful testimony of the failure of leadership.<sup>29</sup>

For Richard Gozney (Ayeoyenikan, 2004)<sup>30</sup> British High Commissioner to Nigeria, at best oil revenue should have been put into use to train and build the capacity and the skills of the nation’s workforce to make way for a truly critical productive mass of the citizens for economic growth. This is essentially because the factors that would grow the Nigerian economy in the 21<sup>st</sup> century would no longer be purely oil or other mineral resources possessed by Nigeria but knowledge, skills and other intellectual property rights. Few multinationals, according to Gozney, dig out oil for Nigeria. They sell the oil mostly in the international market and bring back the money to government to spend. This scenario does not augur well, nor allow for local value addition to create indigenous wealth for the citizens. Therefore, the issue of building capacity of Nigerian citizens ought to be taken seriously to enable the country participate effectively in the

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<sup>28</sup> Tunji Oketunbi, Human Capital: The Missing Link in Economic Development Strategies, the Guardian, Thursday October 13, 2005 at 31.

<sup>29</sup> Lawrence Njoku, How Leaders Misused Oil Earnings, by President’s Aide, the Guardian, Monday August 2, 2004 at 3.

<sup>30</sup> Segun Ayeoyenikan, How to Use Oil Revenue by British Envoy, the Guardian, Thursday August 12, 2004 at 80.



emerging global economy which is driven essentially by knowledge. The capacity building must be to convert such human capacity efforts or outcomes for manufacturing ends.

Low level of human capacity development is woe betiding the country and until it is addressed, the crucial project of empowering the workforce and improve the quality of life for its people, real development, would continue to elude the nation which was 159<sup>th</sup> out 177 nations in the human development index. While so much effort had been channeled to promoting capital market, non-oil export, land reforms and infrastructure, little had been spared for the workforce that would drive the initiatives (Oketunbi, 2005).<sup>31</sup> Thus for Pascal Nwigwe (2005)<sup>32</sup> communities may not complain of non-infrastructure by the oil companies which have made efforts to put projects in place as part of their obligations to the host communities. Rather, they complain that the manner, pattern and focus have been away from human empowerment and human resource development. Despite visible development projects in the communities, infrastructure does not really address the real issues of empowerment. Infrastructures are those things which must be in place so that other things can happen. Infrastructural development would translate to advantage when the people are trained and equipped to use them. The citizens must therefore be equipped to outlive the oil resources. Nwigwe queried: in 50 years or more or less when oil will run dry, what will the people be doing with the bridges and roads if they are not humanly developed?

Attempts by successive governments to ameliorate the deplorable conditions of the people have been based on different criteria depending on the objective of the administration in power. The effect of these anti-poverty programmes have been limited, or have had only marginal impact, as their core rationale has been income-based. There should therefore be a shift of focus from project-centered initiatives to integrated rural and human capital development initiative which will provide employment and empowerment, as well as improve the income and standard of living of the

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<sup>31</sup> See Tunji Oketunbi, Loc. Cit.

<sup>32</sup> Pascal Nwigwe, *Indigenes, Oil Communities Need Empowerment* says Akpannah, the Guardian, Thursday September 15, 2005 at 9.

people (Azaiki and Geo-Jaja, 2006).<sup>33</sup>

In the position paper of the Delta State Government to the National Political Conference<sup>34</sup> the State correctly canvassed that the nature of the ongoing environmental crisis in the Niger Delta in particular had revealed the urgent necessity to develop the capacity of citizens and the Nigerian State to monitor the environment and ensure that industries adopt the best available standards in extracting resources and relating to the environment. The pervasive fog of scientific ignorance among the people about the range of pollutants and the effects of untreated wastes that are dumped in the rivers and neighbourhoods should be overcome quickly. This can be done through sustained mass enlightenment of the *Mamser* type. The Nigerian State, NGOs, the companies and above all, the communities need to play active role in safeguarding the environment for future generations. Thus empowered, the communities can maintain vigilance over industrial pollutants and ensure that State Agencies strictly enforce all environmental laws.

To satisfy the current addiction of the Nigerian State for oil and gas reserves, the peoples of the Niger Delta have been dispossessed of their fundamental property rights in respect of the mineral resources via a long catalogue of obnoxious, suppressive and offensive laws. The 1999 Constitution which was expected to be the foundation of a democracy, shamelessly and undemocratically excluded minority nationalities of the Niger Delta from enjoyment of such rights. The Delta State Memorandum submitted that a Constitution which so abridges the rights of peoples whose lands and waters produce over 80% of the revenue on which the nation depends is certainly not a democratic document and such a denial of property rights through obnoxious laws and formal constitutional exclusion would not have been attempted if the resources were located in the territories of the majorities.

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<sup>33</sup> Steve Azaiki and Macleans Geo-Jaja, *Confronting Poverty and Social Insecurity in the Niger Delta*, the Guardian, Saturday July 1, 2006 at 12-14.

<sup>34</sup> *We Must Break Out of Authoritarian Headmaster –cum- Father-Christmas Complex*, the Guardian, Friday April 15, 2005 at 8.

In his work, *Essays on Nigerian Political Economy*, Asiodu (1993)<sup>35</sup> had raised the issue of the strength of the minorities to confront oppression. He had stated that given the small size and populations of the oil producing areas, it was not cynical to observe that even if the resentments of the oil producing States continue, they cannot threaten the stability of the country nor affect its continued economic development. To the Delta State position paper, Asiodu may have underestimated the capacity of the peoples of the Niger Delta to confront the Nigerian State. The history of the peoples' resistance to injustice in the area goes back 150 years to the era of pre-colonial trans-Atlantic trade. From the era of the judicial murder of Ken Saro Wiwa in 1995, the struggle against oppression and exploitation had recorded dozens of martyrs and to the extent that the posture of the Nigerian State has not changed, the human will to freedom and democracy is still resolute despite demographic size and the dispatch of troops to the area.

The past 50 years have witnessed a rash of militant organizations in the Niger Delta, the death and execution of rights activists, the arrest and detention of others, and hostage taking by restive youths, coup plots, morbid corruption, mismanagement, malfeasance presidential and gubernatorial ambitions and election rigging have been inspired by the quest to take part in, or control of, the oil business.<sup>36</sup>

### **Youth Development and the Oil and Gas Industry**

Youths of the Niger Delta region are frequently criminalized as restive, lazy, obstructive, fetish and un-enterprising, lacking in basic skill and technical knowledge. They are easily associated with all communal and internal ethnic clashes, oil pipeline vandalisation, closure of oil wells, illegal oil bunkering, kidnapping and other atrocious acts.<sup>37</sup> The problems confronting the youths of the Niger Delta are both external and internal.

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<sup>35</sup> P. C. Asiodu, *Essays on Nigerian Political Economy*, Sankore Publishers Ltd, Victoria Island, 1993 at 98-99. See Id.

<sup>36</sup> Oil, 50 Years On, The Editorial Guardian, Tuesday June 13, 2006 at 16.

<sup>37</sup> B.O. Okaba, *Petroleum Industry and the Paradox of Rural Poverty in the Niger Delta*, (Benin: Ethiope Pub. Corp., 2005) at 141.

Externally, the State and the oil companies collaborate to exploit them; internally, are domestic policies on derivation principles, revenue allocation and repressive oil legislations. Past youth employment and empowerment schemes include School-to-land programme, industrial development centre, open apprenticeship scheme, micro credit facilities, and adolescent skill acquisition scheme.

Government targets of the employment of indigenes are never adhered to. Foreign nationals monopolize the high paying technical jobs while the three major ethnic groups secure the bureaucratic and administrative middle class jobs. One of the disturbing and ugly facts of the Nigerian oil and gas industry is that the technical expertise required for exploration and exploitation of the resources largely depends on foreigners (Gbemre, 2007).<sup>38</sup> Vis-à-vis the Niger Delta, Okaba (2005)<sup>39</sup> has alleged that Chevron has turned into a cocoa plantation, Shell a groundnut fadama worsening the manpower development of the Delta region.

For Egbert Imomoh (Chigbo, 1999)<sup>40</sup> Shell has been Nigerianizing for a long time. It started a scholarship programme as far back as 1963 when it went to schools to attract Nigerians to be trained in Universities for the purpose of joining the company. It was to enable the company have Nigerians in senior management positions in the company. In the heat of youth violent attacks on the oil facilities in the Niger Delta in April, 2006 the Federal government rolled out a short, medium and long term programme of the development of the area, an interventionist approach that was to impact employment generation, transportation, education, health, telecommunications, environment, agriculture, power and water resources. Under the job creation initiative, Government announced the creation of about 20,000 fresh jobs that would absorb the youths. The three Armed Forces were to recruit 1,000 youths with the Nigerian army enlisting 500. In the Nigeria Police, 10,000 new recruits were to be enlisted from the coastal States. Of the 1,000 new positions to be filled in the NNPC (NOC) 200 was to be reserved for the coastal States. 7,300 youths with

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<sup>38</sup> Zik Gbemre, *Crude Oil: Not a Renewable Resource*, Vanguard, Thursday June 28, 2007 at 31.

<sup>39</sup> B.O. Okaba, *Id.*, at 85.

<sup>40</sup> Cited, Maureen Chigbo, *Buy Garri in Dollars*, Newswatch, September 6, 1999 at 41.

degrees and National Certificate in Education were equally to be recruited before the end of the year 2006.

The job creation announcement was greeted with cold shoulders. Familoye (2006)<sup>41</sup> had argued that except there was a proper foundation for human capacity development in the region, most of the jobs offered the youths may end up being taken up by others due to lack of competences and certificate deficiency. He had posited further that the special concession for recruitment into the Armed Forces and the Police may not achieve the desired result as most of the youths may end up in the rank and file: 'it is good to say that instead of dissipating energy on violent attacks on oil installations, come and use it in the regular police or any of the Armed Forces. But at what point will a boy who only attended primary school or at best went through secondary education join the force?' For Mojibayo Fadakinte (Fanimó and Onuorah, 2006)<sup>31</sup> promises of job remain promises and they ought not to have come as a response to the violent attacks on oil installations by the youths and any failure on the part of the government to implement the job programmes might send the youths back to the trenches and ultimately lead to a more devastating consequences on the nation's economic interests.

### **Technology Transfer in the Oil and Gas Sector**

Citing the *Draft International Code of Conduct on the Transfer of Technology*, Omorogbe (2003)<sup>42</sup> defines technology as the systematic knowledge for the manufacture of a product, the application of a process or the rendering of a service, whether that knowledge be reflected in an invention, an industrial design, a utility model, or a new plant variety, or in technical information or skills, or in the services and assistance provided by experts for the design, installation, operation or maintenance of an industrial plant or for the management of an industrial or commercial

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<sup>41</sup> See Dele Fanimó, *Obasanjo's Job Offer for Niger Delta Youths: A Carrot without Juice?* the *Guardian*, Tuesday April 25, 2006 at 33. See also Madu Onuorah, *New Development Plan for Niger Delta*, the *Guardian*, Wednesday April 19, 2006 at 1.

<sup>42</sup> See Yinka Omorogbe, *Oil and Gas in Nigeria*, (Lagos: Malthouse, 2003) at 158-159.

enterprise or its activities. To Alleyne, (Atsegbua, 2004)<sup>43</sup> petroleum technology is the systematic and formulated knowledge about the industrial art in the field of petroleum which is capable of changing as a result of researches leading to new discoveries. It has two aspects: the tangible and the intangible. The intangible relates to knowledge and skill and the ability to use the knowledge to repair; maintain and create modifications and innovations of the physical assets which are imported while the tangible aspect is the physical embodiment of the technology: the equipment, tools, machinery and plant.

Technology transfer is first and foremost a transfer of knowledge and not just of a finished product that embodies high technology. A transfer occurs when a technological application that has been developed and applied by one organization is utilized and effectively applied by another organization. For a transfer to be successful, the personnel of the recipient organization must be capable of applying the knowledge transferred by virtue of adequate education. In other words, education forms the bed-rock upon which the drive for technology transfer can be predicated. It also requires continued education by way of in service training and retraining. Furthermore, technology transfer does not lie solely with the industry but through the process of training and adequate exposure to same. A transfer of only one aspect of technology does not meet the ultimate goal of technology transfer or solve the dependency syndrome.

The transfer of petroleum technology from the international oil companies to Nigeria is one of the most complex issues confronting the nation in the oil and gas sector. Although State participation in the industry has been achieved, the management and technical knowledge of the industry is still controlled by the international oil companies. The issue is whether the nation should rely on the oil companies being the principal experts and custodians of petroleum technology for the conveyance of petroleum technology to her or whether she should make efforts, devise programmes and create arrangements which compel transfer of technology or whether

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<sup>43</sup> Cited, L. Atsegbua, *Oil and Gas Law in Nigeria: Theory and Practice*, 2<sup>nd</sup> Edition, (Benin: New Era Pub., 2004) at 188.

she should steal same.<sup>44</sup> Technology transfer is ordinarily not in the interest of the owner organisation, thus its quest has the potentials of giving rise to an adverse relationship between the economic power of the multi-nationals and the political sovereignty of developing nations not only because the ultimate goal of technology transfer is the control of all the phases of the industry which no doubt is at cross purposes with the ultimate goal of the multi-national oil companies, but because the owner must have invested in terms of money, research, resources, time and energy to develop a technology which may not be adequately compensated whereas the recipient state or organization may hanker to acquire a technology with ease and as some may advocate, may steal the technology.<sup>45</sup> According to Alegimenlen (1999)<sup>46</sup> another reason for monopoly in technological acquisition is traceable to the sophisticated and capital intensive nature of technology which changes rapidly and becomes obsolete quickly because of the fast-growing and changing nature of the industry and the need to find new ideas to deal with the changes.

In their work, *Oil and Class Struggle*, Nore and Turner (1980)<sup>47</sup> have canvassed that oil companies resist technology transfer as part of their efforts to avoid displacement in the industry. The companies, according to the authors, strive to block entry into the downstream operations by creating obstacles to transfer. A transfer of petroleum technology is not profitable to the oil companies and it does not further their main concern which is to extract oil and make profit. The national companies are viewed in the light of potential competitors and disrupters of market shares and profits in the industry, thus the multi-nationals are reluctant to transfer technology and managerial skills and their development policies making the host-nations technological dependent (Atsegbua, 2004)<sup>48</sup> The clamour for technology transfer is actuated by the desire of the host-state to fulfill

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<sup>44</sup> L. Atsegbua, *Oil and Gas Law in Nigeria: Theory and Practice*, 2<sup>nd</sup> Ed., (Benin: New Era Publications, 2004) at 184.

<sup>45</sup> Yinka Omorogbe, *Op. Cit.*, at 159. See also R. Engler, *The Brotherhood of Oil*, (Chicago: University of Chicago Press, 1977) at 144 Cited in L. Atsegbua, *Id.*, at 189.

<sup>46</sup> O.A. Alegimenlen, *Issues in the Acquisition of Petroleum Development Technology for Third World States*, OPEC Review Vol. XV No. 2, Summer 1991 at 123, Cited in L. Atsegbua, *Id.*, at 187-188.

<sup>47</sup> P. Nore and T. Turner, *Oil and Class Struggle*, (London: Zed Press, 1980) at 199 – 200. Cited in L. Atsegbua, *Oil and Gas in Nigeria*, *Op. Cit.*, at 186.

<sup>48</sup> See M. Kassim-Momodu, *Transfer of Technology in the Petroleum Industry: The Nigerian Experience* (1988) 22 *JWTL* 51 at 52. Cited in L. Atsegbua, *Oil and Gas Law in Nigeria*, *Id.*, at 187.

the principles of permanent sovereignty and control of the oil industry by the State. However, a nation state that cannot boast of its technology to operate and run its oil industry cannot effectively assert its sovereign rights over its mineral resources. In fact, at the base of the sovereign rights of a state over its mineral resources is technology. It is also fundamental to note that the responsibility for the transfer of technology does not lie on oil companies since it does further their interests.

In the light of the fact that the international oil companies would not readily transfer petroleum technology to the host-state which needs same for its economic growth and political autonomy under market economy dictated by the invisible hands of demand and supply, the host-state has to recourse to legal regimes and regulations to compel transfer of technology from the international oil companies to the host-state.

For Egbert Imomoh (Chigbo, 1999)<sup>49</sup> the best way to bring technology is to bring people into Nigeria to work for a long time. As postulated by Shell, a leading player in the Nigerian oil and gas industry, oil technology is driven by five imperatives: to maximize long term production; access new hydrocarbon reserves; drive down unit costs; reduce negative impact on the society and the environment; and use the most appropriate technologies. In these five directions, the oil industry technology must be actuated to benefit from the 'heavily funded world-wide technology research efforts and the best-practice process sharing to attain world class performances.'<sup>50</sup>

### **Shell and Technology Development in Oil Industry**

Shell pioneered hydrocarbon exploration and production in Nigeria in the 1930s; drilled the country's first vertical well with commercial hydrocarbon discovery in Oloibiri Well 1 in 1956; drilled the country's first horizontal Well in Sapele Well 24 in 1992; made the country's first deepwater oil discovery using state-of-the art technology in 1005 through its subsidiary, Shell Nigeria Exploration and Production limited; made the country's first multi-lateral level 6 horizontal drilling in Imo River Well 64 in 1999; has the Forcados and Bonny terminals – two of the best and most sophisticated in the world; and the Twister Supersonic Gas Technology etc.

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<sup>49</sup> Cited, Maureen Chigbo, Loc. Cit.

<sup>50</sup> See Shell: A Model in Partnership, Tell, January 14, 2002 at 37.



Shell has remained a technology leader in the industry with the use of 'cutting-edge technology' and has continued to play the leading role in the extension of the frontiers of the industry.<sup>51</sup>

Claiming to be in the forefront of developing technologies and determined to acquire the best technologies and use same as a tool to contribute to national growth and development through the means of technology transfer and implementation of specific projects, Shell has made technological breakthroughs in the industry in the following 8 areas: Leads the industry in multi-lateral well technology. In 2000, it drilled the first level 6 multi-lateral well. From a single well, many horizontal wells are drilled: deploys expandable sand screens, ESS. These sieve-like materials that keep out sand and efficiency of drilling consumables like cement, drill mud, steel and pipe etc: deploys multi-phased booster pump technology in which oil, water, as well as gas collected from 8 remote wells were transported, prior to separation, to a flow station. This technology which reduces the need for multiple flow stations would be particularly beneficial to the economic development of marginal fields: reduces land take and environmental footprint by introducing concurrent drilling and production. SPDC drilled and produced concurrently from 6 closely-knit wells for the first time onshore in the Tunu field: deploys Twister Technology for gas dehydration which is in use at the Utorogu gas plant. Twister technology allows for smaller and lighter facilities than other gas dew-pointing alternatives and eliminates the need for glycol/methanol systems: Shell has commenced the use of 4D seismic technology. The first onshore time-lapse seismic technology in Nigeria is acquired over the Nembe field. The technology allows better definition of by-passed hydrocarbon and helps optimize further field development opportunities: Shell pioneered the shared conductor technique for offshore drilling. Normally, a conductor takes one casing at a time. In EA21 and 22, two strings were used in one conductor leading to smaller platforms and spaces and thus a sharp drop in well costs: Information technology forms the basis of modern technology and shell claims to have the biggest private

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<sup>51</sup> Id.

telecommunications net-work in the world.<sup>52</sup>

Yet, according to Salau (2005)<sup>53</sup> Shell has been rated the most ethically behaved oil company in the world as revealed after a study by a Spanish ethics management rating firm, Management and Excellence (M&E) an investor service company specialized in producing research and ratings of companies around the world. It hit this position with the score of 82% having excelled in many of the 120 points examined in the study concerning corporate governance, transparency, environmental management, ethics and corporate social responsibility. Shell was claimed to have reduced its oil spill from 18,700 tons in 1999 to 6,100 in 2004; increased women in supervisory or professional position from 17.1% in 2000 to 19.5% in 2003 and pledged 5 million dollars to Tsunami victims 3 days after the disaster.

### **Conclusion**

It is clear that the literature on human capital development in the oil and gas industry is largely tilted to the activity and commitment of the Nigerian State. There is no structured attention which the multinational oil companies are paying to the development of Nigerians in the sector. The coast is therefore clear that the multinational oil companies have no obligation towards manpower development in the sector except to the extent to which its operations are required and expatriates cannot be conveniently brought in. In most cases, they have casual staff or contract staff or out-sourcing of staff. The principles of local content policy have not been fully imbibed by the multinationals and concrete guidelines on the implementation of the principles have not been fully sketched out. Government involvement in business of oil and gas is a misnomer and this has informed the level of impact its activities in the sector have achieved in manpower development.

### **Recommendation**

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<sup>52</sup> Id. at 38-39.

<sup>53</sup> Sulaimon Salau, Shell Tops Ethics Management Rating, the Guardian, Wednesday, April 27, 2005 at 59.

In a mixed economy like Nigeria, the influence of the State in business activities and manpower development is relatively higher as it goes beyond the threshold of regulation. Public private partnership appears to be the current trend recommendable in this area. The State should thus pursue further the principles of local content to ensure that higher skills in the operations of the industry are transferred to the indigenous population. Local content vehicles should also be encouraged to key into the oil and gas sector and increase indigenous corporate participation.

## References

- Alegimenlen, O. A., Issues in the Acquisition of Petroleum Development Technology for Third World States, OPEC Review Vol. XV No. 2, Summer 1991 at 123.
- Anyanwu, J. C., et al, The Structure of the Nigerian Economy (1996-1997), (Onitsha: Joanee Educational Publishers Ltd., 1997) at 288
- Asiodu, P. C., Essays on Nigerian Political Economy, Sankore Publishers Ltd, Victoria Island, 1993 at 98-99. See Id.
- Atsegbua, L., Oil and Gas Law in Nigeria: Theory and Practice, 2<sup>nd</sup> Ed., (Benin: New Era Publications, 2004) at 184.
- Comrade Peter Akpatason, Energy Briefs, Vanguard, Tuesday January 9, 2007 at 23.
- Daemi Kunaiyi-Akpanah, Community Relations in the Oil Industry – Perspective of a Stakeholder, the Guardian, Thursday December 8, 2005 at 78 – 79.
- Dele Fanimu, Obasanjo’s Job Offer for Niger Delta Youths: A Carrot without Juice? the Guradian, Tuesday April 25, 2006 at 33.
- Engler, R., The Brotherhood of Oil, (Chicago: University of Chicago Press, 1977) at 144.
- Eugene Mckenna and Nic Beech, The Essence of Human Resource Management, (London: Prentice Hall, 1988) at 9-11.
- Isa Adulsalam, Way out of Niger Delta Crisis-Dungs, The Guardian, Friday July 27, 2007 at 4.
- John Storey, Human Resource Management: A Critical Text, Eted, (London: International Business Press, 1995) at 5-7.
- Kabir Mohammed, PTFD: The Journey So Far – Successes and Achievements, Vanguard, Sunday April 15, 2007 at 8.
- Kassim-Momodu, M., Transfer of Technology in the Petroleum Industry: The Nigerian Experience (1988) 22 JWTL 51 at 52.
- Kodilinye Obiawu and Clifford Ndujihe, Labour Walks the Tightrope as the Nation Faces High Fuel Prices, the Guardian, Monday, September 27, 2004 at 9.
- Lawrence Njoku, How Leaders Misused Oil Earnings, by President’s Aide, the Guardian, Monday August 2, 2004 at 3.
- Madu Onuorah, New Development Plan for Niger Delta, the Guardian, Wednesday April 19, 2006 at 1.
- Maureen Chigbo, Buy Garri in Dollars, Newswatch, September 6, 1999 at 41.
- Nore, P and Turner, T., Oil and Class Struggle, (London: Zed Press, 1980) at 199 – 200.
- Oil, 50 Years On, The Editorial Guardian, Tuesday June 13, 2006 at 16.

- Okaba, B. O., Petroleum Industry and the Paradox of Rural Poverty in the Niger Delta, (Benin: Ethiope Pub. Corp., 2005) at 141.
- Olusegun Obasanjo, My Stand on the PTF, The Guardian, Sunday March 18, 2007 at 3.
- Pascal Nwigwe, Indigenes, Oil Communities Need Empowerment says Akpannah, the Guardian, Thursday September 15, 2005 at 9.
- Segun Ayeoyenikan, How to Use Oil Revenue by British Envoy, the Guardian, Thursday August 12, 2004 at 80.
- Shell: A Model in Partnership, Tell, January 14, 2002 at 37.
- Steve Azaiki and Macleans Geo-Jaja, Confronting Poverty and Social Insecurity in the Niger Delta, the Guardian, Saturday July 1, 2006 at 12-14.
- Sulaimon Salau, Shell Tops Ethics Management Rating, the Guardian, Wednesday, April 27, 2005 at 59.
- Tunji Oketunbi, Human Capital: The Missing Link in Economic Development Strategies, the Guardian, Thursday October 13, 2005 at 31.
- We Must Break Out of Authoritarian Headmaster –cum- Father-Christmas Complex, the Guardian, Friday April 15, 2005 at 8.
- Yinka Aderibigbe, Muzzled Opposition and Increase in Fuel Price, the Guardian, Monday, September 27, 2004 at 15.
- Yinka Omorogbe, Oil and Gas in Nigeria, (Lagos: Malthouse, 2003) at 158-159.
- Zik Gbemre, Crude Oil: Not a Renewable Resource, Vanguard, Thursday June 28, 2007 at 31.